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# The Grog Ration

# COMBAT FATIGUE:
## *A LONG-TERM DIAGNOSIS*

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Aesculapius commisit pelago talam

CONTENTS



Syndromes of combat stress have long been described in the medical literature. In a study of 300 soldiers from the U.S. Civil War, Dr. Jacob Mendez Da Costa (1833-1900) described a malady he termed "irritable heart." This condition appeared to affect soldiers exposed to combat, as well as civilians. It was characterized by shortness of breath, palpitations, and exertional chest pain, as well as headache and dizziness. Da Costa attributed the condition to various causes, including infectious diseases. The post-Civil War literature also described a syndrome called "nostalgia." This was felt to have a psychological cause and was attributed to severe homesickness. It was characterized by extreme apathy, loss of appetite, diarrhea, and sometimes fever.

During World War I, a syndrome similar to the one described by Da Costa became a major cause of medical evacuations back to England. It was given various names: "Da Costa syndrome," "soldier's heart," "effort syndrome" (as the symptoms were exacerbated by effort), and in the United States, it was called "neurocirculatory asthenia" (or neurasthenia). Despite much effort to find both causes and treatments, little consensus was reached in this regard, nor was consensus reached over whether the primary etiology was physiological or psychological in nature.

**The Battle of Antietam (17 September 1862) was the bloodiest day of the Civil War resulting in 23,000 killed and wounded. This picture, taken by Alexander Gardner, shows "Bloody Lane" where about 5,600 soldiers lay dead or wounded after the battle. (Photo: National Park Service)**

During the war, neurologists described another syndrome that that was related to the stress of combat. It was felt that the soldiers who were unable to function in the war environment were suffering from a type of brain

damage caused by the concussion associated with shell explosions. Hence the diagnosis of "shell shock." It was also referred to as "trench neurosis." Typical symptoms included a mental breakdown in battle, a dazed or detached manner, an exaggerated startled response, and severe anxiety. Studies conducted around 1916 determined that this phenomenon was a psychological disorder.

The French and Germans, and later the Americans, realized that psychiatric casualties were best treated near the front instead of being evacuated to base hospitals. In contrast, early in the war, the British evacuated all their psychiatric casualties. This policy proved less than effective. By 1916, the British, too, treated their psychiatric casualties near the battlefront.

Throughout the U.S. involvement in the war, Navy dentists, hospital corpsmen, and physicians served with the Second Marine Division on the front-lines, providing front-line medical care, first-aid, and processing casualties for transfer to rear Army and Navy medical facilities. There is no record, however, of certified Navy psychiatrists serving with the Marines or at Navy hospitals in France.

Military medicine's experience with combat stress patients in World War I showed that many could be rehabilitated utilizing the "**PIE**" treatment principles developed by Army neurologist MAJ Thomas W. Salmon (1876-1927). PIE was an acronym meaning: ***P****roximity* (treatment near the front lines), ***I****mmediacy* (immediate initiation of short-term treatment once the problem was identified), and ***E****xpectancy* (treatment with the expectancy of a prompt return to duty.) The primary dynamic operating in a majority of patients was a man's need to handle his feeling of guilt for letting down his comrades, as well as his pride and identification with his unit. Salmon was an emissary of the Army Surgeon General who observed and synthesized the British and French experiences into a comprehensive treatment and prevention program.

Despite the World War I experience indicating successful treatment of combat stress patients utilizing PIE techniques, these and other lessons learned were apparently forgotten in the inter-war period. Although these lessons were documented in U.S. Army Medical Department publications, the Army doctrine at the beginning of World War II was that only weak neurotic men succumbed to what was now called "combat fatigue" or "combat exhaustion"; normal soldiers did not break down. This led to the Army's reliance on screening psychiatric interviews. The policy was to routinely hospitalize and then discharge anyone screened with the diagnosis of "psychoneurosis," resulting in an unacceptably high discharge rate. It was not until late 1943 that the Army began considering each individual on a case-by-case basis.

CAPT John W. Appel, MC, USA, joined the Army in 1941, and quickly realized the futility of the service's screening process. He proposed to the Army Surgeon General the concept of "preventive psychiatry" and championed this by utilizing an epidemiological approach. Realizing the importance of motivation and morale in preventing psychiatric combat casualties, Appel acted as a consultant on the set of Hollywood director Frank Capra's five-part film series *Why We Fight*. CAPT Appel and his team studied the length of combat effectiveness for soldiers in combat zones and ultimately recommended that an infantryman combat tour not surpass 180 aggregate days. Dr. Appel also stressed the importance of psychiatric support at the front lines and gradually the concepts developed in World War I were re-instituted. By the end of the war, it was readily acknowledged that every man has a breaking point during combat exposure.

**"Shell Shock" patient**

During World War II, the U.S. Navy also initially ignored the World War I lessons of PIE. Despite this, the Navy and Marine Corps had a much lower rate of combat fatigue casualties than the Army. There were several factors to account for this. During most of the war, the Navy and Marine Corps

personnel were volunteers, unlike the Army. Hence they were, typically, more motivated and able to set higher physical and mental standards. The Navy also had psychologists in place at Naval Training Centers before the war started, and hence had a more sophisticated and effective screening program.

In the Korean War, many of the lessons learned from World War II were utilized once the initially chaotic combat situation stabilized. Initially psychiatric casualties were evacuated to Japan or the United States, at one point accounting for almost one-third of some front line combat units. Applying the lessons learned from World War II, CDR Sam Mullin, MC, USN, was sent to Korea where he established front line treatment programs, and educated other medical personnel in the management of psychological casualties.

During the Korean conflict, the Navy had a simple, but effective treatment protocol for psychiatric casualties. It consisted of rest, hot food, mild sedation, and encouragement. The psychiatric aid stations returned about 70% of their patients to combat within 10 days. During this time, the relapse rate for the Marine Corps was about 6%. While the U.S. Army had a return to duty rate of 80%, their relapse rate was nearly 33%. In addition, it was observed that there was a higher rate of combat fatigue cases occurring in the South Pacific theater as compared with the European theater in WWII. Acknowledging an environmental causal factor, the Navy implemented a nine-month rotation period, thus limiting their personnel to this environmental exposure.

The Navy frequently utilized hospital corpsmen and often other patients to aid with therapy and also peer counseling. Frequent trips to frontline medical units by CDR Mullin helped to educate their personnel in the management of psychiatric casualties and, as a result, there were fewer men actually sent to psychiatric aid stations. Typically, with the First Marine division in Korea, there were two psychiatrists and two clinical psychologists assigned.

The lessons learned from prior conflicts were readily utilized during the Vietnam War. For all services, combat fatigue accounted for less than 6% of all psychiatric hospitalizations, and the return to combat rate was 78%. The nature of the combat in Southeast Asia may well have contributed to this outcome. In contrast to World War II, combat involved small units with scattered encounters with the enemy, and periods of relative calm and safety interspersed, during which times men enjoyed good food and recreational facilities, including access to bars and brothels. In addition, combat tours were limited to 12 months.

**Underscoring the prevalence and importance of combat fatigue, BUMED produced a film entitled "Combat Fatigue" starring Gene Kelly. (Photo: BUMED Library and Archives)**

Studies of U.S. Marine psychiatric casualties aboard the U.S. Navy hospital ship *Repose* revealed an interesting presentation of cases of combat fatigue versus what was described as "pseudo-combat fatigue." The cases of combat fatigue comprised only 15% of all the psychiatric casualties aboard the *Repose*. This percentage paralleled the experience of the medical officers assigned to the Marine units ashore. The characteristics of combat stress patients aboard *Repose* were: (1) they were young men of considerable responsibility with excellent military records; (2) they had been

in the war zone for greater than six months; (3) had a strong sense of bonding with their unit. The most common presentation was that of insidiously or acutely developing generalized anxiety or depression with accompanying psychopathological manifestations.

The cases of pseudo-combat fatigue were commonly seen in young men with pre-existing personality disorders who became symptomatic in the war zone environment. They often had a past history of poor adjustment behavior, poor stress tolerance, poor emotional control, and possible prior psychiatric symptoms. They had often been in the war zone for less than six months. In general they identified poorly with their military unit, and rarely were in a leadership position. Unlike combat fatigue patients, they rarely had guilt feelings, and as a group they responded poorly to treatment. While in the hospital environment, their symptoms would often improve. However, the symptoms frequently recurred with the prospect of return to duty.

The pattern of psychiatric presentations also differed during the Vietnam War. Substance abuse and lack of discipline often superimposed on underlying personality disorders were major factors leading to many instances of administrative separation from the service. In 1969, in the Navy and Marine Corps, the number of dishonorable discharges increased 53%. By mid-1971, 61% of all medical evacuations from Vietnam were neuro-psychiatric patients resulting from substance abuse.

Over the course of the war, psychologists were attached to each of the two Marine Corps divisions stationed in-country, as well as at the primary receiving hospitals in Japan and Guam. The mental health teams that served in-country in Vietnam consisted of a psychiatrist, a psychologist, and two to four hospital corpsmen.

During the Gulf War, there was a remarkably low incidence of combat stress reactions reported during both the air war phase and the ground combat phase. Some of the factors that contributed to the mental health of the Persian Gulf units included the lack of easy access to alcohol and illicit drugs, the successful and unambiguous outcome of the operation, the continued support from home, and the redeployment priority of moving personnel out of the theater as quickly as possible.

Although the actual ground combat phase lasted only three days, Navy medical personnel treated cases similar to combat stress that occurred during the phase of anticipation of actual combat. The treatment modalities the Navy employed were identical to those used for actual combat stress patients.

When Operation Desert Storm ended, the rapid demobilization lead to a newly described form of stress. The “stay-behind” units consisted mainly of non-volunteer combat support troops as well as a small self-defense force retained in Kuwait. These troops found themselves with a very large mission to accomplish without the sense of purpose or patriotism that characterized Operation Desert Shield/ Desert Storm. In addition, they were frequently without their parent units, and dealt with unfamiliar commanders. As a result, the psychiatric evacuation rates rose dramatically, with depression being the most frequent diagnosis. This pointed out the importance of mental health assets in the post-combat phase as well as in the pre-combat phase.

Acknowledging the importance of combat stress, the Uniformed Services University of the Health Sciences (USUHS) has developed a course in battle fatigue identification and management. All fourth-year students take a course in Military Contingency Medicine which contains a module in battle fatigue identification, management, and prevention (BFIM). These acquired skills are tested during the five-day field training exercise known as Operation Bushmaster, which is taken during the senior year at USUHS.

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# NOTES ON PSYCHIATRIC CARE IN THE EARLY NAVY (1830-1865)

*By Harold Langley, PhD*
*Independent Historian*

In the 1830s, when the first four permanent naval hospitals were open, the naval hospital in Norfolk, VA, began receiving patients suffering from psychiatric disorders. This was anticipated and in building the hospital, cells were included to hold such persons. The same was true when a permanent naval hospital was opened in Brooklyn. In Philadelphia, a home for aged Navy enlisted men—known as the Naval Asylum—also included these cells. From the time of their arrival at these hospitals, psychiatric patients created problems for the surgeons in charge. Navy surgeons were well aware of the fact that these new hospitals were inadequate for the needs of the mentally ill.

In August 1842, Congress reorganized the Navy Department into five bureaus, including one devoted to medicine and surgery. Surgeon William P.C. Barton, the new Chief of the Bureau of Medicine and Surgery (BUMED), tried to get information on the names and needs of each mentally ill patient at Navy hospitals. One urgent need was for clothing. He found that the chief of the Bureau of Provisions and Clothing would not issue any clothing to the patients because they could not be accountable for the care of such items. Barton tried to purchase clothing and tobacco for these patients. But since there was no specific appropriation to cover such outlays he could not pursue this course. This made it necessary to acquire condemned clothing for the use of the patients.

In the process of informing himself about the insane, Barton wanted to know how and when that person came to a hospital as well as have a medical evaluation of their case. This marked the first systematic examination of the mentally ill in the Navy. It also brought to light flaws and irregularities in the existing arrangements.

In March 1847, in the midst of the Mexican-American War, Surgeon Thomas Williamson reported to the chief of BUMED on the state of affairs at the Norfolk Naval Hospital. He had 74 on the sick list. He added that, “Our Maniacs are increasing here, and are great sources of annoyance to all the Sick, and others.” Efforts were being made to prepare more cells, which, “are all important.” With war on, the medical bureau could do no more than sympathize with the plight of the surgeon.

On 30 August 1848, Congress passed the Naval Appropriations Act. This included a section that authorized the Secretary of the Navy to transfer patients to a “lunatic hospital” which “in his opinion will be most convenient and best calculated to promote the restoration of reason.” Such patients would receive pay of up to $100 a year.

The Government Hospital for the Insane, later known as St. Elizabeth’s Hospital, opened in 1855. The mentally ill of the Navy were transferred to this facility for care. Naval surgeons were freed from the responsibilities of long-term psychiatric care for patients, but they continued to encounter them time to time in their practice. It was much easier now to transfer them to a facility dedicated to their care. The mentally ill were still a matter of interest to the chief of the medical bureau. Every year thereafter, until his death in office in 1865, the Chief of BUMED, Surgeon William Whelan included information about the patients at St. Elizabeth’s in his reports to the Secretary of the Navy. He was concerned that they continued to receive every possible care and attention. This was in keeping with the medical and humanitarian sensibilities that had long characterized many naval officers.

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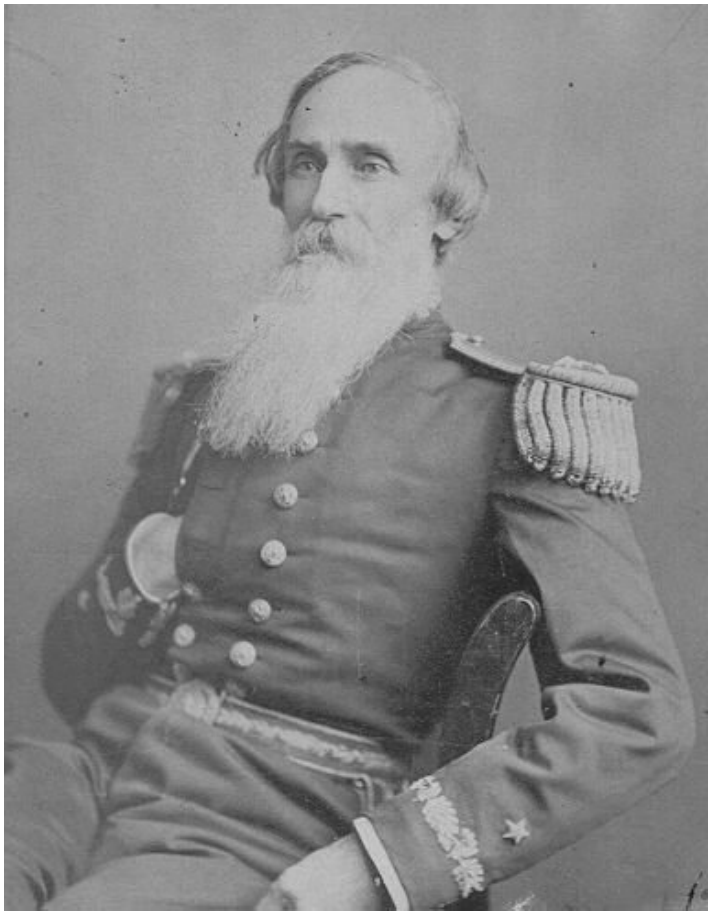
# *Surgeon Duelist, U.S.N.*

*Among the most unusual stories in the annals of Navy medicine is the case of Henry Willis Bassett, the dueling surgeon. In 1830, Dr. Bassett was assigned to USS* Vandalia *which made port in Rio de Janeiro, Brazil. Other officers aboard this cruise included future Rear Admirals Lieutenant Joshua Sands, Midshipmen Benjamin Franklin Sands (no relation to Joshua), and David Glasgow Farragut. By all accounts, Surgeon Bassett proved to be an officious character who was anything but a friend to his fellow wardroom officer. While in Brazil, Surgeon Bassett provoked an altercation with Joshua Sands that proved to be fatal. The following is an account of this incident that appeared in the 1899 posthumous memoir of Benjamin F. Sands entitled* From Reefer to Rear-Admiral: Reminiscences and Journal Jottings of Nearly Half a Century of Naval Life.

On the 26th of July the American brig "Virginia" arrived with a number of officers for the squadron, and again there a changing about between the vessels. On the 17th, Surgeon Henry Willis Bassett left the ship to return to the United States, and on the 22d, Lieutenant Joshua R. Sands and Surgeon William Johnston left the ship to return to the United States, in the American brig "Thule."

All these latter changes were in consequence of an unfortunate affair, originating in a misunderstanding amongst the wardroom officers. For some time there had been hot blood shown between Dr. Bassett and Lieutenant Sands. It appeared that Mr. Francis Markoe, a young lawyer from Philadelphia, at that time staying in Montevideo, had made agreeable acquaintances amongst the wardroom officers. They, thinking to make him more comfortable than he was on shore, and at the same time themselves enjoy his pleasant society, invited him, with the consent of the captain, to live aboard the "Vandalia" as their guest, Dr. Bassett alone objecting to the invitation, of which objection Mr. Markoe was ignorant when he accepted the invitation.



**RADM Benjamin F. Sands (1811-1883) was a nineteen year old midshipman who witnessed the Surgeon Henry Bassett–LT Joshua Sands duel. (Photo: U.S. Naval Observatory)**

Bassett never lost an opportunity for the utterance of spiteful and annoying remarks, disturbing the comfort of the mess-table, and at different times giving rise to disagreeable scenes and embarrassing situations in the wardroom. So marked and so often repeated were they, that we of the steerage plainly saw that there was serious trouble brewing.

It grew, at last, so apparent, that Dr. Bassett was bent upon creating a difficulty, that to preserve the discipline of the ship, he was ordered to his room by the first-lieutenant, Sands; and

thus things went on until matters approached their climax, and the surgeon sent Mr. Sands an invitation to a hostile meeting, which he could not accept, because of his position, without great breach of duty and discipline. "Charges" were then mutually preferred, upon which courts-martial were convened, and both of them being put on trial, Sands was acquitted, whilst Dr. Bassett was found guilty, and sentenced to suspension from duty for six months, and to be dismissed from the squadron.

The sentence was approved, and apparently with the intention of obeying his orders home, the surgeon took up his quarters on shore, whence he at once addressed a challenge to Lieutenant Sands, declaring that now he was detached from the ship, there could be no question of discipline, and no reasonable excuse to present as an obstacle to a meeting as before proposed, and Sands felt that he was compelled to accept it.

The meeting took place at sunrise the next morning upon the beach at Praya Grande, abreast our anchorage. When on the ground Lieutenant Sands asked if the matter could not be settled amicably, saying, "You, Dr. Bassett, have a wife and children at home; I have no one to care for me. I will do anything in my power, consistent with my honor, to prevent this going any further." But the surgeon protested, and insisted on the duel proceeding, and thereupon the seconds placed them in position, and at the word they exchanged shots. The lieutenant stood unhurt, the doctor missing him and receiving the ball of his adversary just above the heart. He fell and soon expired.

Both were expert marksmen, and both had been engaged in other such affairs, and had often for amusement practised [sic] at a mark on board ship, the surgeon always excelling the lieutenant until this last sad occasion. We subsequently heard that upon his arrival home Sands had reported to the Secretary of the Navy and to the President (General [Andrew] Jackson), and that the latter told him he was determined to stop dueling between officers and citizens, having just dismissed Lieutenants Hunter, Westcoat and Burns for affairs with a young Philadelphia doctor; but he remarked that he would not interfere between officers whose profession was fighting, and who were trained to arms! So Sands and Dr. Johnston, his second, were restored to duty, the former afterwards becoming a rear-admiral, and the latter reaching the grade of medical director. ☙

## Navy Medicine's Duelists

**The Surgeon Bassett affair was anything but an isolated incident in the U.S. Navy. According to the article "Dueling in the Old Navy" (*U.S. Naval Proceedings*, 1879) by Charles Oscar Paullin, there were eighty-two duels fought by naval officers between 1798 and 1848. Of these, six were fought by Navy surgeons. The following is a list of these "Surgeon-Duelists" and their opponents.**

- ☙ Surgeon's Mate **A.M. Montgomery** vs. Captain J.E. Freeth, RN (Gibraltar on 31 March 1819)*
- ☙ Surgeon **Wilmot F. Rogers** vs. Midshipman Samuel Gaillard (Port Mahon, Minorca in 1822)*
- ☙ Surgeon's Mate **Thomas J. Bradner** vs. ??? (on 23 August 1827)**
- ☙ Surgeon **Henry W. Bassett** vs. Lieutenant Joshua Sands (Rio de Janeiro, Brazil on 20 August 1830)***
- ☙ Assistant Surgeon **Euclid Borland** vs. Midshipman W.C. Spencer ( Port Mahon, Minorca in December 1831)*
- ☙ Passed Assistant Surgeon **George W. Palmer** vs. Midshipman R. E. Hooe (St. Simons Island, GA, in October 1836)****

* No fatalities

** Surgeon Bradner was killed. Unfortunately, the name of Dr. Bradner's opponent, and the location of the duel, has not been left for posterity.

*** Surgeon Bassett was killed

**** Dr. Palmer was mortally wounded and died about ten days after the encounter. Although, listed as a "duelist" by Charles Paullin, this fracas was anything but typical. Hooe used a pistol and Dr. Palmer fought with a pair of tongs.

# FROM THE ANNUAL REPORTS OF THE SURGEON GENERAL OF THE U.S. NAVY:

## *A MISSION TO MOLOKAI*

*In January 1865, the Hawaiian legislature passed "An Act to prevent the spread of leprosy," authorizing the designation of government lands where lepers (people suffering from a chronic bacterial disease known as leprosy or Hansen's disease) could be forcibly exiled for life. Within the year, the government purchased Kaluapapa, a near inaccessible peninsula on the island Molokai for what would become one of the largest leper colonies in the world. In subsequent years, Kaluapapa would become famous for the plight of its sequestered population and for the work of a dedicated Belgian priest named Damien who would die from complications of the disease in 1889. In the summer of 1876, the Bureau of Medicine and Surgery ordered a Navy surgeon named George Worth Woods (1838-1902) to Molokai to study and report on the disease. The following is an extract of his report originally published in* The Annual Report of the Surgeon General of the U.S. Navy *in 1879.*

No asylum dedicated to the purpose of isolating infected human beings could be more perfectly located than the leper settlement of Molokai. It is situated on the northern side of the island, in a narrow valley representing the crater of an extinct volcano, compassed on one side by a precipitous *pali* or precipice 2,000 feet in height, and on the other sea, two barriers which render the isolation of the settlement complete. Its situation exposes it to the constant action of the northeast trades which search every corner, and temper the extreme heat of summer, rendering the days unoppressive [sic] and the nights delightfully cool.

The land comprised in the settlement is about 1,600 acres of volcanic soil, full of rocks and bowlders [sic], a large portion of which has been diligent labor prepared for cultivation. At the eastern extremity a brawling stream empties itself through a wild ravine into the sea, and furnishes an abundant supply of water, distributed through the settlement by means of pipes. In its vicinity are located the government taro patches—the cultivation of this esculent root requiring an abundant supply of water—which produce more than a sufficiency for the use of the lepers, and the sale of the surplus affords a small revenue.*

There are few trees in the settlement, on account of the constantly blowing saline breezes, but here and there in sheltered situations we find them, and at the foot of the *pali*, in the centre[sic] of the valley is a volcanic cone within which is a salt-lake, and clinging to its sides, a luxuriant growth of kukui trees.

Various buildings are scattered over the length and breadth of the government domain, but at certain points there is a tendency to concentrate into villages or hamlets, and these have received various designations.

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The number of houses in the settlement is about 230. Those occupied by the

**Joseph de Veuster (1840-1889), aka "Father Damien," was a Belgian missionary worked to improve the living conditions of lepers on Molokai. (Photos courtesy of National Park Service)**

* Taro, sometimes referred to as "kalo," is a tropical plant that is the prime ingredient of the traditional Hawaiian staple food "poi."

lepers are neat structures of wood or native grass huts, and surrounded by cultivated patches of land where bananas, plaintains, yams, pine-apples, and melons are raised in abundance. The dwelling of the superintendent is a small but pretty cottage of one story, surrounded with broad verandas and comfortably furnished. It is placed in the centre [sic] of a large enclosure, with detached kitchen, servants' quarters, and stable. Near by is the store, and closely adjacent to the hospital, a series of whitewashed cottages within ample grounds and surrounded by a neat fence. The Protestant church is a plain structure without ornament, while the Catholic church is an ornamental though diminutive edifice, in which some attention is paid to ecclesiastical architecture and an attempt made at decoration, both within and without. It is entirely the work of Father Damien, the parish priest, a devoted and self-sacrificing Belgian, who has consecrated his life to these unfortunate people. His missionary preparation made him a good carpenter, and he not only built his own church and the chapel at Kaluapapa, but the comfortable dwellings now occupied by the lepers, in the building of which he was both superintendent and assistant, the board supplying only the nails and lumber.

**Catholic cemetery at Kaluapapa.**

Near by the church is a Catholic cemetery arranged by Father Damien, where, to save expensive and laborious excavation of the soil, the dead are, as it were, buried above ground, a mound of cement being raised over their remains. This, when whitewashed, receives an inscription, and serves all the purposes of a tomb.

The hospital grounds contain five ward buildings, a cook-house, dispensary, and office, storehouse, six cottages for employés [sic], and one for extremely bad cases of the disease. They are thoroughly cleansed daily, have a weekly scrubbing, and are whitewashed within and without every three months. In the hospital were found thirty-two patients, some of them extremely bad cases, but the majority by no means worse than many at large in their own homes. They were here on account of their age, or because of being without relatives or friends to give them proper attention in their maimed condition.

Each cottage constituting a ward is well ventilated by means of numerous windows, and kept scrupulously clean through frequent whitewashing and scrubbing. The bedding supplied consists simply of a mat and blanket, easily cleansed, but non-absorbent mattresses or pillows are issued, and to this is probably due, in some degree, that comparative freedom from offensive odor which surprises us in apartments occupied by patients affected by this vilest of diseases.

There is no physician resident on the island, and medical attendance is confined to the monthly visits of Dr. [Frank H.] Enders, acting as "traveling physician" for the [Hawaii] board of health, who is represented in the interval by an apothecary. The latter has a supply of sulphate of magnesia and iodide of potassium, which, with cathartic pills and an expectorant for general use, are made to fulfill the necessities of internal medicine, while for external use he prepares various ointments, especially one of sulphur. In this connection it may be stated that the board of health, after long experiment, has come to the conclusion that leprosy is incurable, and that there is but little to do beyond dressing ulcerated surfaces and assisting the ordinary functions of the body; but it is, nevertheless, desirable that there should be a resident physician to embrace the great opportunity here offered of studying leprosy and treating such intercurrent disease as may arise

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No pen can describe adequately the horrible deformity of these outcasts, with their features and limbs distorted by the various processes of the disease. We may find the face of shining coppery hue;

eye brows and lashes gone; conjunctivitis, with great congestion, and eversion of the lids, uncovering the eyes, sightless, perhaps, from corneal opacity; tubercular swelling and ulceration of the lips, cheeks, and alae of the nose, with the loss of the septum and flattening of this organ; enlargement of the ear lobes; tubercular ulceration of the tongue, fauces, larynx, and posterior nares, producing nasal discharges, foetid[sic] breath, and feeble, croaking voice, while the general cutaneaous surface will be thickened and rugose, or may be a mass of tubercular ulceration, and the fingers or toes represented by a series of phalangeal stumps, standing at every angle on the metacarpus or metatarsus.

Yet these people are not sufferers in any acceptation of the term—the anaesthetic [sic] character of the disease in most cases preventing this—but are, on the contrary, happy. They employ themselves in gardening, fishing, and the care of their poultry and pigs; they have their horses and their cows, and the board provides them with comfortable dwellings, good clothing, and all the poi, meat, and dried fish they desire, while they enjoy complete exemption from all taxation. These numerous advantages, with perfect freedom from all care for the morrow, are soon appreciated, and there is but little discontent ever manifested among them. They are great smokers and gossips, and are generally found assembled in front of their dwellings, squatted on the ground or upon mats, indulging in their declamatory style of conversation, and passing around the little wooden pipe with brass mouthpiece…as a means of spreading contagion. They are exceedingly fond of dress, which usually shows itself with the females in the acquisition of a gaudy hat; and on gala days they are seen, both men and women, dashing around the settlement on horseback, dressed in all the finery of which they are possessed, to which is always added a *lei* composed of bright flowers or fragrant leaves of the maile. They are also fond of dancing, and the native hula-hula is enjoyed here as much as elsewhere; while for those of the better class who wish to indulge in the more modern school of dancing, there is an opportunity afforded at a weekly hop given by an unfortunate female leper, a lady of good family and fashionable education.

The band is an institution of the settlement and makes a very creditable appearance in its gay uniform, and bearing the Hawaiian standard.* It was organized some years since by a leper having considerable musical culture, and since his decease the organization has been maintained. It is really wonderful, the sweet music they produce, when it is considered that their only instruments are tin flageolets, originally intended for toys, and a couple of drums; but a true soul for music possessed by nearly all Hawaiians has enabled them to rise superior to their rude instruments, and interpret the simple native airs most acceptably. Many of them sing in chorus, accompanied by the others, their voices, modified by the disease, having most peculiar, weird-like sound; and associated with their deformities of face and hands, as well as their peculiar instruments, their performance is indeed unique and sad. The band performs on all holidays, when any distinguished guests visit the island, and at funerals, as well as the Catholic church festivals. At funerals it is the invariable concomitant, the last wish of the dying being often for this attention, the payment for its services taking precedence, in the testator's mind, of all legacies.

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It will thus be seen that the lepers of Molokai are not a suffering people; but, cared for with a wise humanity which redounds to the credit of the nation, are both comfortable and happy. They certainly are better off than the majority would be in their own homes; and here every necessity of life, as interpreted by the Hawaiian, is supplied with liberality; while the hygienic surroundings of the lepers are vastly improved, the very position of the settlement rendering it a perfect sanitarium. With good houses, plenty of clothing, an abundance of nutritious food, hospital comforts in times of suffering, and with educational and spiritual advantages, it must be acknowledged that little more could be asked for of a paternal government.

*John Tayman writes in his book *The Colony: The Harrowing True Story of the Exiles of Molokai* (2006) that Surgeon Woods first encountered the band upon his arrival on the island. "Woods saw a dozen children marching across the lawn playing makeshift flutes. A dozen more hurried behind the band swinging lamps in the dusk. Two boys flanked the procession, hoisting Hawaiian and American flags. When the parade reached … [Woods'] cottage, [Father] Damien stepped forward [and greeted the doctor.]" Damien then lead the band into a rendition of the "Star-Spangled Banner." (page 113)

# Navy Medical History Quiz

**1.) In the early twentieth century psychoneuroses was thought to fall into two main categories: hysteria and neurasthenia. According to one American neurologist, if the patient was "lachrymose and emotional [the doctor] calls the disorder hysteria; if depressed and inert, he calls it neurasthenia." The term neurasthenia was coined in 1869 by an American neurologist who once served in the U.S. Navy as an "Acting Assistant Surgeon." Who was this pioneer doctor?**

A.) Silas Weir Mitchell
B.) George Miller Beard
C.) Thomas William Salmon
D.) Joseph Babinski

**2.) Historically, "Post-traumatic stress disorder" has been known as everything but:**

A.) Combat Fatigue
B.) Nostalgia
C.) Neurasthenia
D.) Da Costa's Syndrome
E.) Sailor's Heart
F.) Irritable Heart

**3.) On 22 August 1820, on the "dueling grounds" of Bladensburg, MD, Navy surgeons Samuel Trevett and Bailey Washington attended to what dying naval hero?**

A.) William Bainbridge
B.) Stephen Decatur
C.) James Barron
D.) John Rodgers

**4.) In what year did the U.S. Navy make dueling an official violation of law?**

A.) 1842
B.) 1848
C.) 1862
D.) 1866

**5.) According to historian Charles Oscar Paullin, how many Navy surgeons were killed in duels between 1798 and 1848?**

A.) two
B.) three
C.) four
D.) five

**6.) Kaluapapa (on Molokai) served as a quarantine for Hawaii's leper population until what year?**

A.) 1898
B.) 1912
C.) 1935
D.) 1965

**7.) When was the first Navy hospital in Hawaii constructed?**

A.) 1898
B.) 1915
C.) 1923
D.) 1941

## Answers

**1.) B. George Miller Beard. Dr. Beard served as a Navy "Acting Assistant Surgeon" in 1865.**
**2.) E. Sailor's Heart.**
**3.) B. Stephen Decatur**
**4.) D. 1866**
**5.) B. Three (Drs. Thomas J. Bradner, Henry W. Bassett and George W. Palmer)**
**6.) D. 1965. In this time over 8,000 lepers were exiled to Kalaupapa**
**7.) B. Naval Hospital Pearl Harbor was constructed in 1915.**

*The Grog Ration* is a bi-monthly publication dedicated to the promotion and preservation of the history of the Navy Medical Department and the field of maritime medicine. Presently, the staff of *The Grog Ration* is looking for contributions for themed issues on Aviation Medicine, the Civil War, Dental Corps, Hospital Corps, and the Nurse Corps. Original articles (of less than 2,000 words), historical artwork and photographs, and themed trivia questions are needed. If you would like to contribute, please contact us at:


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